

# **Resource Recovery & Waste Management Strategy Consultation Draft**

Resource recovery and waste management strategy background report  
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## Executive Summary

This draft strategy document has been developed for the Yarriambiack Shire Council as the first stage in the development of a 10-year resource recovery and waste management strategy. The final strategy will replace any previous waste management strategies.

This strategy is designed to provide clear strategic and operational guidance for the provision of services and investment in waste management services for the short, medium and long term with guidance on all waste streams, sustainable options, related regulation, circular economy principles and regional collaborative opportunities.

Given the development of the Victorian Government's Recycling Victoria policy in 2020, the changing focus of the EPA and a greater national and state focus for onshore solutions to recycling materials, it is appropriate to develop a resource recovery and waste management strategy that moves beyond a waste management focus and begin the transition to a more circular approach.

In consultation with the community and stakeholders, this strategy will develop objectives and actions that focus on the avoidance, refusal and reuse of items as well as those that stimulate the cycling of materials as opposed to the 'pointy' end of the waste hierarchy that features treatment and disposal.

This means building the knowledge and understanding within the community is critical if a big shift in consciousness and behaviour is to happen. However, this is a step that must be taken and developed over time if a genuine change in our approach to waste is to change.

This draft resource recovery and waste management strategy is designed to lay the foundations for a community consultation process that will ultimately identify the optimal ways for council to meet both the Federal and Victorian Government policy and environmental obligations as well as identify potential opportunities for community and economic development activities that will see greater resource recovery and reduce waste going to landfill.

# Introduction

## Vision and scope of the strategy

This strategy is being developed in the context of national, state and regional objectives as well as Council Plan objectives. Overall objectives would include:

- Reduce the waste that goes to landfill and increasing recycling rates
- Encourage innovative and cost-effective ways to improve resource recovery
- Maintain and improve the management of Council waste management facilities & infrastructure
- Meet Council's environmental obligations
- Involve Council staff, customers and the general community in actions to improve waste management.

### Vision

The Yarriambiack community is committed to leading in waste reduction and recovering resources that can be used to benefit the local environment and developing a circular economy.

## Framework

The Yarriambiack Shire Council plans and acts within a policy framework for waste management and resource recovery that is governed by national and state parameters, which are in turn impacted by global issues and markets. A range of policies, plans and regulations at regional, state and national levels have been considered in the development of this strategy.

An overview of the framework for the Yarriambiack Shire Council within the Victorian and Commonwealth context is provided below.



\*The Grampians Central West Waste & Resource Recovery Infrastructure Plan is still relevant even though they will be absorbed into DELWP as a new agency in the middle of 2022 as it is the only relevant regional plan that has ever been produced for the broader region.

It should be noted that the regions - using the current regional structure – will have a regional circular economy plan prepared in the lead up to the establishment of Recycling Victoria in July 2022.

The other agency that is involved in waste regulation and enforcement is Victorian EPA. This includes litter and illegal dumping reporting, registration of facilities such as transfer station and environmental monitoring of landfills (open and closed).

## The Waste Hierarchy

The underlying principle of all waste management policies is the waste hierarchy. The purpose of the hierarchy is to establish the order of preference for waste management options to ensure that priority is given to those actions that will avoid waste generation and increase the recovery of resources.



## National Waste Policy 2018 principles

The National Waste Policy provides the following aims:

### 1. Avoid waste

- Prioritise waste avoidance, encourage efficient use, reuse and repair
- Design products so waste is minimised, they are made to last and we can more easily recover materials

### 2. Improve resource recovery

- Improve material collection systems and processes for recycling
- Improve the quality of recycled material we produce

### 3. Increase use of recycled material and build demand and markets for recycled products

### 4. Better manage material flows to benefit human health, the environment and the economy

### 5. Improve information to support innovation, guide investment and enable informed consumer decisions

## Victoria's circular economy goals

Recycling Victoria: A new economy is the Victorian Government's policy which aims to steer the state transition to a circular economy. It is guided by four goals spanning the life cycle of materials (make, use, recycle and manage).

- **Goal 1 - Design to last, repair and recycle.**  
Generate less waste in businesses through innovation and design; use recycled materials in products and consider impacts across product life cycles; and support business to explore new circular economy business models.
- **Goal 2 - Use products to create more value.**  
Help people make smart purchasing decisions and extend the life of products and support the reuse economy, repair goods where possible.
- **Goal 3 - Recycle more resources.**  
Reform kerbside collections to generate more value from waste; improve the separation of recyclable materials; develop markets for recovered materials; plan for and boost investment in recycling infrastructure; embed the waste hierarchy in the management of materials; support the development of appropriate waste to energy facilities.
- **Goal 4 - Reduce harm from waste and pollution.**  
Protect communities and the environment from high-risk and hazardous wastes.

## Grampians West Waste & Resource Recovery Group Implementation Plan

The Grampians Central West Waste and Resource Recovery Group (GCWWRRG) implementation plan provides the following aims:

- Increase Resource Recovery & Market Development
- Improve infrastructure & operations
- Advance data collection & planning
- Foster relationships to optimise diversion from landfill



## KEY THEMES:

Considering objectives and priorities from the policy documents at all levels of governance, framework the Council Waste Strategy will need to encompass the following:

1. Encourage waste reduction by educating the community about better purchasing options, promoting the use of recycled and recovered products, avoid single use products and encouraging a mindset that seeks to repair or reuse things rather than automatically seeking to replace with new. The YSC can lead in this approach through its own activities and operations.
2. Increase the opportunities for resource recovery through efficient practices, collaborative regional initiatives and by working with local businesses and industry.
3. Explore and encourage localised initiatives with businesses and industries that seek to increase recycling and repurposing of discarded, but valuable, materials that would otherwise end up in landfill.
4. Develop meaningful engagement with state government through the future Recycling Victoria agency to reduce waste to landfill, provide for more and improved recycling and to establish a sustainable and thriving circular economy within the Yarriambiack council area.
5. Engage with the local community to develop a deeper understanding of recycling, why it is important and how the community can actively participate in reducing what is sent to landfill and increase the value of what is recycled.

## Where are we now?

### Services provided by Council

Kerbside garbage and recycling provided to 3186 properties (74.5% of households) in Warracknabeal, Hopetoun, Murtoa, Minyip, Rupanyup, Beulah and Brim. The service is also utilised by some non-residential customers (schools, businesses, health services).

Ten transfer stations – Warracknabeal, Hopetoun, Murtoa, Minyip, Rupanyup, Patchewollock, Beulah, Yaapect, Speed/Tempy & Woomelang provide drop-off facilities to all residents and businesses.

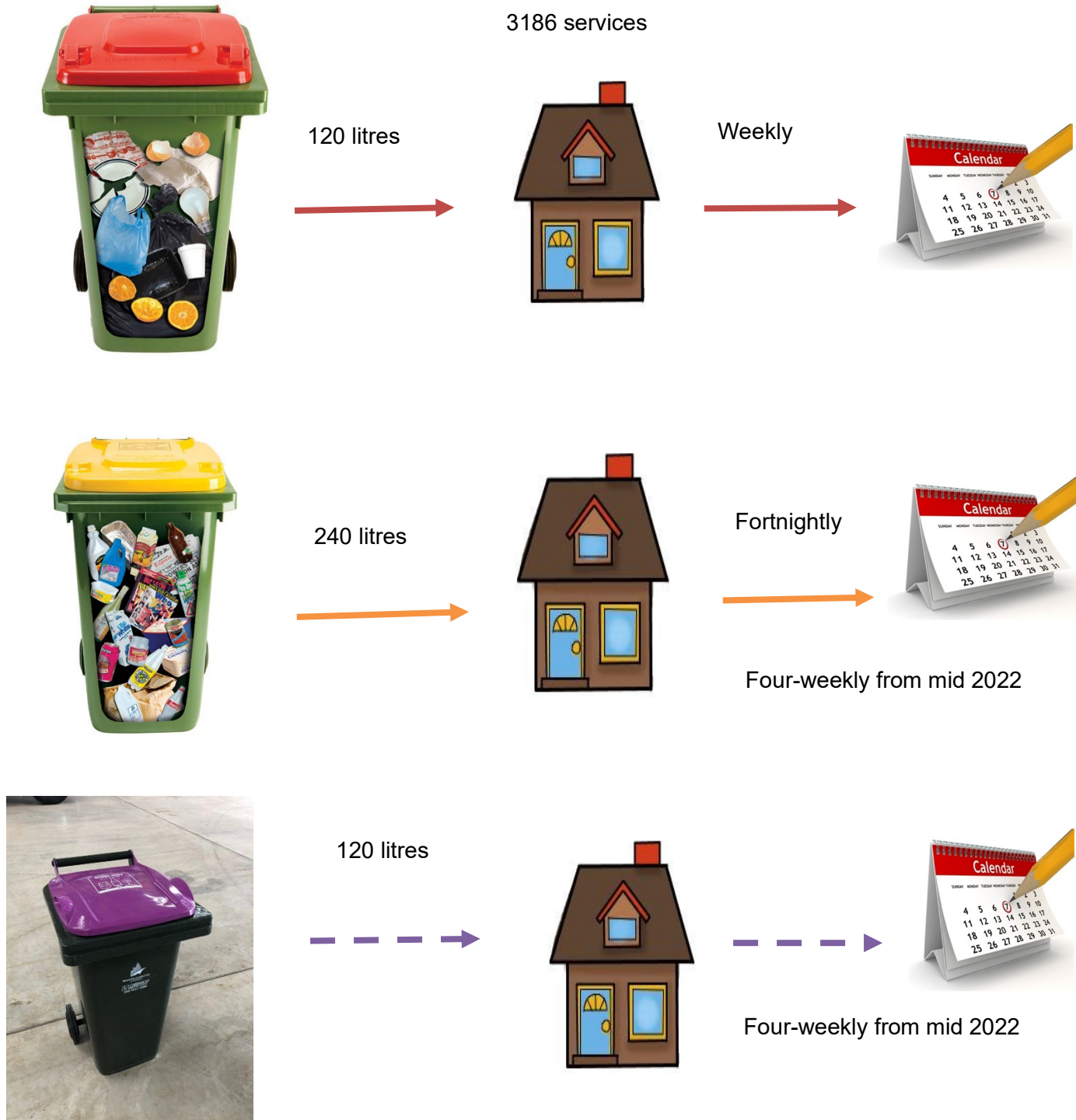
There are public place waste and recycling bins that are also serviced by the local contractor.

Until July 2021 Council operated the Warracknabeal landfill which received municipal waste, commercial waste and construction and demolition waste. Since then, all these waste streams have been transported to the Dooen Landfill operated by the Horsham Rural City Council. Council is responsible for rehabilitation and ongoing monitoring of the Warracknabeal licensed landfill and post-closure management of other small unlicensed landfills across the Shire.

Community education on waste management is provided to residents and businesses.

## Kerbside bin service

Council provides a kerbside collection service in the towns of Warracknabeal, Hopetoun, Murtoa, Minyip, Rupanyup, Beulah and Woomelang. Garbage is collected weekly in 120 litre bins. Comingled recycling is collected fortnightly in 240 litre bins at all locations. A new 120 litre glass bin will be introduced in the second half of 2022. This will change the collection cycle for mixed recycling to four weekly, alternating each fortnight with the glass bin collection.



## Transfer stations

Transfer stations, commonly referred to by residents as 'tips' are a significant part of the waste infrastructure network in any council area. Like many transfer stations, many of Yarriambiack's transfer stations were previously old landfill sites. While some have been closed for many years, there are several that have only recently closed with the Warracknabeal Transfer Station being capped in 2021 and subject to an EPA monitoring regime for some years to come

As of November 2021, all the Yarriambiack transfer stations were registered with the EPA as part of the new regulations which focus on a general environmental duty. The council must reduce the risk of harm from our activities:

- to human health and the environment
- from pollution or waste.

This means the approach to protection of human health and the environment has changed. The expectation is that we will manage our activities to avoid the risk of environmental damage. We must also respond if pollution does occur.

The largest and busiest transfer station operated by council is located at 108 Tip Rd, just out of Warracknabeal.

Until 2021 Council operated a landfill at Warracknabeal on the same site as the transfer station. The landfill accepted around 2,500-3,000 tonnes per year of material and was licenced to receive solid inert waste, putrescible waste and shredded tyres.

The landfill was rehabilitated in stages with the final stages capped in 2021. There is an ongoing requirement for monitoring of groundwater and landfill gas at the site.

The transfer station is a drive through area where customers drop off their waste in each designated area. There are areas for green waste, scrap metal, DrumMuster, mattresses, tyres and other recyclable items. There is a purpose-built E-waste shed for safe storage of electronic waste items. It also contains a significant volume of agricultural plastic waste in the form of single use grain bags. It will also be the location of the glass crusher that will process the glass collected in the new glass kerbside collection service and glass collected from the councils of Horsham, Hindmarsh, West Wimmera and Buloke.

The Yarriambiack Shire also operates transfer stations at Patchewollack, Speed/Tempy, Yaaapeet, Hopetoun, Beulah, Woomelang, Warracknabeal, Minyip, Rupanyup and Murtoa. Opening times are listed below.

Compared to similar size councils, the Yarriambiack Shire operates a large number of transfer stations. The combined problem of ageing infrastructure, lack of electricity at some sites, security issues and a small customer base make operating these facilities to an appropriate standard while servicing the community an ongoing challenge. The overall cost of running the transfer stations in the 2019/20 year was \$560,232.

This draft strategy is an opportunity to consult with the community on what other options can be considered into the future to assist in managing waste that would ordinarily be dropped off at transfer stations. Of significant concern are those problematic waste streams that need to be dealt with appropriately to avoid incorrect disposal or illegal dumping. These include car batteries, paint, gas cylinders, polystyrene, smoke alarms, printer cartridges etc.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
PATCHEWOLLOCK	Open by appointment only...(24hrs notice required) Please call 0437 876 012 for further info						
SPEED/TEMPY	Open by appointment only...(24hrs notice required) Please call 0437 876 012 for further info						
YAAPEET	Open by appointment only...(24hrs notice required) Please call 0437 876 012 for further info						
HOPETOUN *		10am - 12noon		2.00pm - 5.00pm			10.00am - 2.00pm
BEULAH			1pm - 3pm				2.00pm - 5.00pm
WOOMELANG		1pm - 3pm					9.00am - 12noon
WARRACKNABEAL *		8am - 12noon	1.00pm - 5.00pm	1.00pm - 5.00pm	8am - 12noon	8am - 12noon	1.00pm - 5.00pm
MINYIP		1.30pm - 4.30pm					8.00am - 11.00am
RUPANYUP				9.00am - 12noon			1.00pm - 4.00pm
MURTOA *		8am - 12noon		1.00pm - 5.00pm			1.00pm - 5.00pm

Transfers market with \* accept e-waste.

In keeping with the need to comply with the EPA General Environmental Duty and OH&S requirements, Yarriambiack transfer stations have been reviewed for improvements to operational practice and infrastructure maintenance. These improvements include:

- There is to be no storage or retention of any item that is not required to be placed in the E-Shed. All items that enter the Transfer Station are required to be deposited into either the general waste/Hard Waste skip, green waste area, scrape metal pile, concrete recycling pile, DrumMuster cages or recycling bins, whichever is appropriate to the item and the Transfer Station site.
- No items are to be stored in the buildings formally known as Second Chance sheds or within the staff sheds.
- All E-Waste that is stored in the E-Shed should be stored in the correct area for collection. Signage should be installed and maintained to ensure this process is followed.
- The only items that should be stored in the E-Sheds are:
  - Electrical items – Televisions, Computer Monitors, Small electrical appliances etc.
  - Batteries – both car and small batteries (in correct storage containers)
  - Paint (in correct storage containers)
- Mattresses – (Warracknabeal and Murtoa for collection, Hopetoun for transport to Warracknabeal) No mattresses should be accepted at other sites.
- No items that are brought to the Transfer Stations are to be dismantled by the employees this is for both safety and contractual reasons. The exception to this is child restraint seats with belts (which must be cut) to prevent re-use.
- No waste oil is to be accepted at any Transfer Station except the Warracknabeal Transfer Station.
- No gas bottles are to be accepted at any Transfer Station except the Warracknabeal Transfer Station.
- The Transfer Stations are to remain closed on days of Total Fire Ban.

## Waste Education

In recent years, council has worked in conjunction with the GCWWRRG and the Victorian Government to educate residents about correct waste management practices and behaviour. Regional and state programs (eg. *Send your E-waste to a better place*, *Get it Right on Bin night* etc) provide resources that are used by Council in the local community. There has not been a significant effort to undertake waste & recycling education beyond that by council.

Education of residents on waste management topics is done using Council's website, e-newsletter and social media channels. The new kerbside glass bin will see a significant ramping up of waste and recycling education to the community to ensure people understand the new service, the need for glass separation and the opportunity to reduce mixed recycling contamination from the current 20%.

The new glass service and the new waste and recycling contract are both opportunities to explain to the community why getting the right thing into the right bin is important. In the case of glass, we are processing that ourselves and using that material in our own works. That means there is a direct and local reason for getting glass recycling right. By aligning the glass collection with a localised solution, it should make the narrative of why getting the right material in the right bin an easier one to prosecute.

Yarriambiack Shire has received funding from Sustainability Victoria (SV) to undertake the kerbside glass education. SV has also prepared good quality collateral to be used for this purpose. These will be statewide resources, which ultimately are a better and more cost-effective option that collateral produced by individual councils. YSC will have the opportunity to use templates for flyers, bin stickers, magnets and social media tiles throughout the implementation of the new service.

Consultation on the strategy will also be a good opportunity to identify the gaps in resident's knowledge and understanding of waste and recycling. Traditionally we are told that people do not understand what to put into the recycling bin or that it should be put in loose, not bagged. These are messages that have been expounded for years, yet it is still a problem. The recent troubles experienced by the recycling sector - which resulted in recycling having to go to landfill have exacerbated the problem as well.

It should also be noted that waste education has largely focused the householder and on recycling rather than waste reduction. This leaves a significant portion of the waste production – business with little understanding of waste and recycling for their business needs and even less about how to reduce that waste for both themselves and their customers.

The remaining service that council will need to consider is that of food or garden organics (FOGO). These are the most problematic forms of waste when it comes to landfill greenhouse gas emissions. Equally they are also the materials that present the biggest opportunity if there is enough volume. Equally they can also be largely dealt with by residents through improved education on food waste and home composting or worm farming. It is likely that a significant number of residents already do some of that. Further, there are localised opportunities that suit small communities in these areas as well.

The last area of education that needs to be considered is that of bin tagging for those residents who continually put things into the wrong bins – the result is high levels of contamination. Some councils undertake a process that includes:

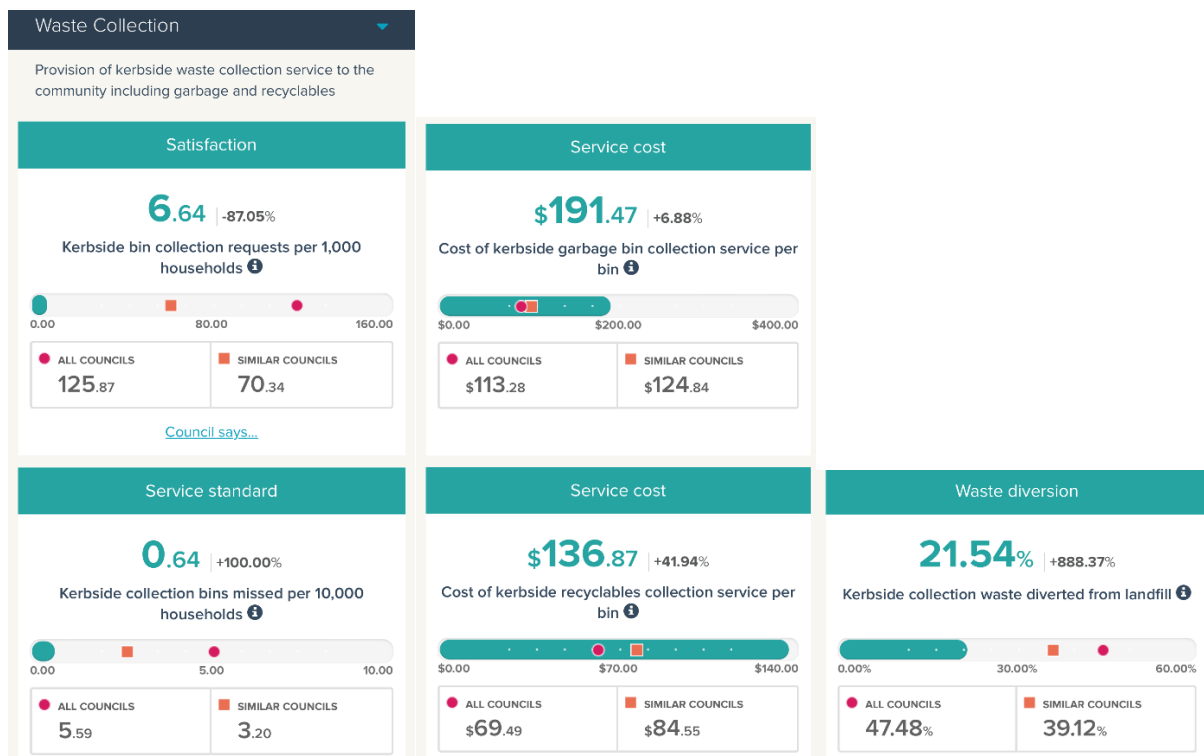
1. First time - Driver puts a sticker on the bin advising what is wrong and Council staff record details in register.
2. Second time - Driver puts another sticker on the bin and Council staff send a warning letter with education material to the address.
3. Third time – the service is stopped. A letter is sent to the address advising that the service is to be cancelled unless the resident contacts Council with information about how they plan to address their behaviour. A letter is also sent to the owner of the property if the owner does not occupy the residence.

Councils that undertake this process indicate that there is improvement in the contamination levels and this is demonstrated by regular waste and recycling audits.



## Performance and achievements

The kerbside indicators from 2019-20 for Yarriambiack Shire as displayed publicly on the “Know Your Council” website are shown below.



These figures reflect the challenges faced by more remote rural councils in terms of cost and the fast-moving changes in the waste and recycling sector because of international challenges and government policy. While many of these are not easily influenced by the operations of the Yarriambiack Shire Council, issues such as the waste diversion rate can be improved through greater community engagement and better aligning services with community needs.



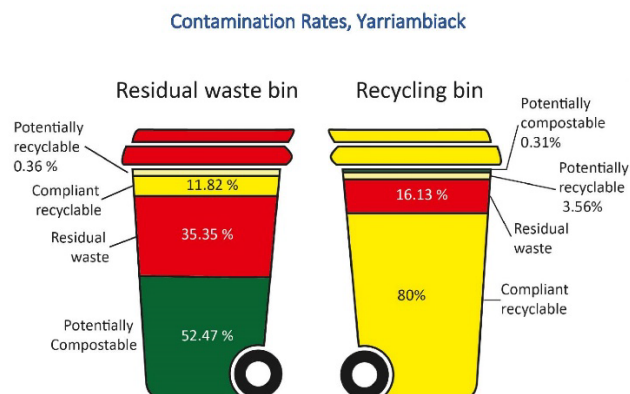
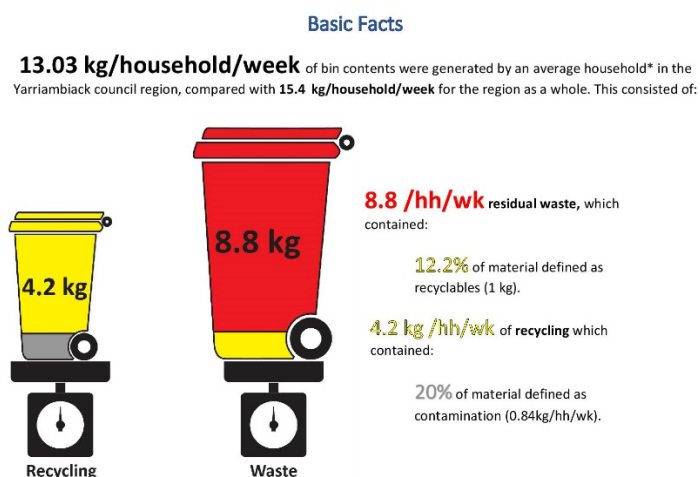
## Waste generation and material recovery

Based on the recent annual data collected by Sustainability Victoria from all councils regarding diversion rates - the proportion of material that no longer goes to landfill and is instead recycled or composted, Yarriambiack Shire consistently performs poorly. The level of diversion is consistently a little over 20% which makes it one of the poorest performing councils – generally in the bottom 8 out of 70 councils.

There are reasons why this is the case and the performance is not dissimilar to nearby councils such as Hindmarsh and Horsham. A lot of the reasons for that performance is reflected in a lot of the issues already noted, including:

- 2 bin service that only includes landfill waste and mixed recycling
- Lack of a food and garden organics service
- Little or no significant waste education in the broader community
- High costs of service delivery and transportation to Melbourne (in the case of recyclables)
- Lack of trust in the recycling system in recent years

The most recent audit results demonstrate the issues that need to be addressed to improve performance.



### Resource recovery rate:

The resource recovery rate for recyclables was **76.38%**.

The resource recovery rate for organics was **not available**

### Diversion rate\*:

The overall kerbside diversion rate was **25.87%** factoring in residual waste

With the current bin system, if all recyclables and compliant organics in the waste stream were recovered, the diversion rate could be up to **33.875%**.

If all households were provided with waste, recycling and FOGO bins; and all recyclables, garden organics and other FOGO compliant organics could be recovered from the waste stream, the potential diversion rate could be up to

**58.92%.**

\*Diversion rate is defined as the percentage of the total waste stream diverted from landfill. It is calculated by dividing the weight of materials accepted in the recycling bins and organics bins by the total weight of contents of all bins X 100

## What do we want to achieve?

Yarriambiack Shire is not performing relatively well in its kerbside diversion rates and contamination levels – these are areas that must be improved if overall performance is to be improved. The strategy aims to improve these metrics through community education and communication.

The Council-run transfer stations provide a comprehensive service to the community that allow residents to safely dispose of most waste materials in a responsible manner. The strategy aims to increase awareness and take-up of programs that recover resources and protect the environment. At the same time these services need to be cost effective and provide good value.

The strategy has a strong focus on involvement of staff, kerbside customers and the general community in waste reduction and recovery activities.

### Targets for 2022-26:

Measure	Target
Kerbside diversion rate	Increase from 26% in 19/20 to 35%
Glass diversion	Initial aim of 75%
Household waste kg/hh/wk	Decrease from 8.8 kg/household/year to 7.8 kg/household/week
Reduce recycling contamination	Reduce contamination in recycling bins from 20%+ to 10%.
Waste management at public events	Waste avoidance and diversion practices introduced at all YSC-supported events and at all Council venues.

# How do we achieve this?

## Communications and Engagement Actions

1. Actively engage with state government through Recycling Victoria to support delivery of the Yarriambiack Waste Management Strategy.
2. Promote recycling and recovery programs eg. E-Waste, mattress recycling, Detox your Home, DrumMuster and ChemClear.
3. Provide ongoing community education via social media, traditional media and public signage to inform residents what can go in kerbside bins.
4. Develop a mobile phone app to provide waste management information and services
5. Develop YouTube videos to promote waste avoidance, good waste management practices and community champions.
6. Establish or connect online community groups to promote and support waste reduction, reuse and repurposing.
7. Support community events that practice and promote waste reduction.
8. Promote and support the Buy/ Swap/Sell platforms in Yarriambiack Shire.
9. Support community groups to apply for funding programs that focus on start-ups such as Toy Library, Repair Café and Tool library etc.
10. Support schools and clubs to improve resource recovery and waste avoidance.
11. Promote and support community clean up days eg. Clean Up Australia Day.
12. Focus community education on waste management costs and responsibilities.
13. Promote and support waste avoidance and good waste management practices within Council's operations.

## Strategic Actions

1. Review Council's Procurement Policy to optimise recycled content in goods purchased and increase material reuse and repurposing.
2. Encourage contractors to avoid waste generation and use recovered materials
3. Specify reparability in procurement of goods so that items may be repaired to extend their life and avoid unnecessary waste.
4. Partner regionally to bulk buy or share equipment or services with other Councils or organisations in the region.
5. Include waste-wise event management guidelines for community grants supported by YSC.
6. Establish best practice guidelines for Council's capital project planning and delivery to avoid and reduce waste.
7. Evaluate a hard rubbish collection option or a Garage Sale program to enable re-use and reduce waste to landfill.
8. Investigate options for locally managed food and garden organics processing that suit small communities.
9. Investigate initiatives through engagement with local businesses, industries and community to reduce waste, reuse or repurpose waste that would otherwise end up in landfill.
10. Encourage community participation and promotion of ideas that will assist in reducing waste and increasing recycling or diversion from landfill.

### Operational Actions

1. Introduce a separate glass kerbside bin in 2022 for residents in kerbside collection zones
2. Increase use of truck cameras, education and engagement to reduce contamination in kerbside recycling bins.
3. Undertake regular bin audits to assess current diversion rates and contamination levels in kerbside bins.
4. Address illegal dumping and littering through increased awareness, education and enforcement.
5. Ensure that all public place and event bins are placed appropriately to ensure optimal use.
6. Introduce a FOGO service as per transition plan – but seek localized solutions to ensure the best outcome for the community, environment and cost.

### Capital Actions

1. Complete review of all transfer station capital requirements over the next 10 years to ensure there is a plan to provide fit for purpose facilities in the long term.
2. Review Council infrastructure design principles and guidelines to reduce waste within Council's capital and works planning and delivery
3. Review options for mobile problematic waste collection options.
4. Complete transfer station site works to improve access and drop-off areas to eliminate contamination, improve operational functions and support community recycle and reuse practices.

### Advocacy Actions

1. Advocate to state and federal government seeking support to assist with the implementation of Council's commitment to waste reduction and recycling of discarded, but valuable, materials that would otherwise end up in landfill
2. Advocate via the Municipal Association of Victoria (MAV) and others to return more landfill levy to Councils to improve waste management.
3. Advocate for regional solutions to create economies of scale for Circular Economy industries.
4. Advocate for funding to support waste reduction initiatives.

### **Council support for local business actions**

- Local investment and involvement in recycling enterprises.
- Options for waste re-use initiatives for industry
- Local business involvement in Container Deposit Scheme.
- Local investment in recovery and recycling schemes for woodchip, garden waste, glass and cardboard.
- Organic waste processing opportunities Investment attraction in industries that recycle and reuse.
- Business with supply chain processes that reduce, re-use or prevent waste generation.
- Options for recovery and recycling of large volumes of industrial wastes such as farm plastics.
- Regional business incubator to focus on waste sector.
- Support for local organisations to manage their waste onsite.

**Key engagement questions for community feedback:**

- What are the actions in the Strategy that you believe will be most effective in reducing waste?
- What other actions would you like to see included in this Strategy?
- What do you see as the barriers for the Yarriambiack community to reduce, recycle and repurpose waste that would otherwise go into landfill?